TRENDS IN DOMESTIC AND INTERNATIONAL BANKING

Introduction

- The banking world has experienced three trends in the past five decades, deregulation, financial innovation, and globalisation.
- The first trend began with the deregulation of the 1970s and continued with the push for globalisation, financial innovation, and increased competition
- This trend came to an abrupt halt with the global financial crisis (GFC) of 2007–2008
- The COVID-19 pandemic may change the way banking operates

Introduction

- Banking is not what it used to be
- The conventional mono-task of taking in deposits and making loans remains in different guises but it is not the only or even the main activity of the modern bank.
- The modern bank is a multifaceted financial institution, staffed by multi-skilled personnel, conducting multitask operations.
- Banks have had to evolve in the face of increased competition both from within the banking sector and without, from the non-bank financial sector.
- In response to competition banks have had to restructure, diversify, improve efficiency and absorb greater risk

Introduction

- Banks across the developed economies have faced three consistent trends that have served to alter the activity and strategy of banking
  - Deregulation
  - financial innovation
  - globalization

The nature of the financial system and the position of banking

- Borrowers are matched with lenders directly through the financial markets, which consist of money markets, bond markets, and equity markets and additionally, through a financial intermediary
- Financial intermediaries operate as banks and other Monetary Financial Institutions (MFIs — such as building societies in the UK), insurance and pension funds, and other financial intermediaries (OFIs), such as mutual funds.
- These other financial intermediaries also include the fintech and P2P platforms that apply Artificial Intelligence (AI) and crowdfunding methods to intermediate between borrowers and lenders
- You can see that lenders can engage with borrowers directly through the financial markets by purchasing claims to assets that are offered by borrowers or they can deposit funds at banks that undertake the responsibility of lending the funds to borrowers.

The nature of the financial system and the position of banking

- A second role of the financial system is to lubricate the transactions within an economy by providing the payment mechanism.
- However, the development of mobile money and blockchain technology has challenged banks as the main provider of medium of exchange services

Traditional Rail: [Buyer] -> [Origin Bank] -> [Correspondent Bank] -> [Clearinghouse] -> [Destination Bank] -> [Seller] (Takes 2-5 Days)
Blockchain Rail: [Buyer] ----------> (Smart Contract / Ledger) ----------> [Seller] (Takes 2-5 Seconds)

- An important ancillary issue has been the size of the financial sector in relation to the economy and studies show that there is an inverted U-shape relationship between the relative size of the financial sector and its contribution to economic growth.
- Countries with highly developed financial systems such as the USA are on the wrong side of this relationship.

Financial System

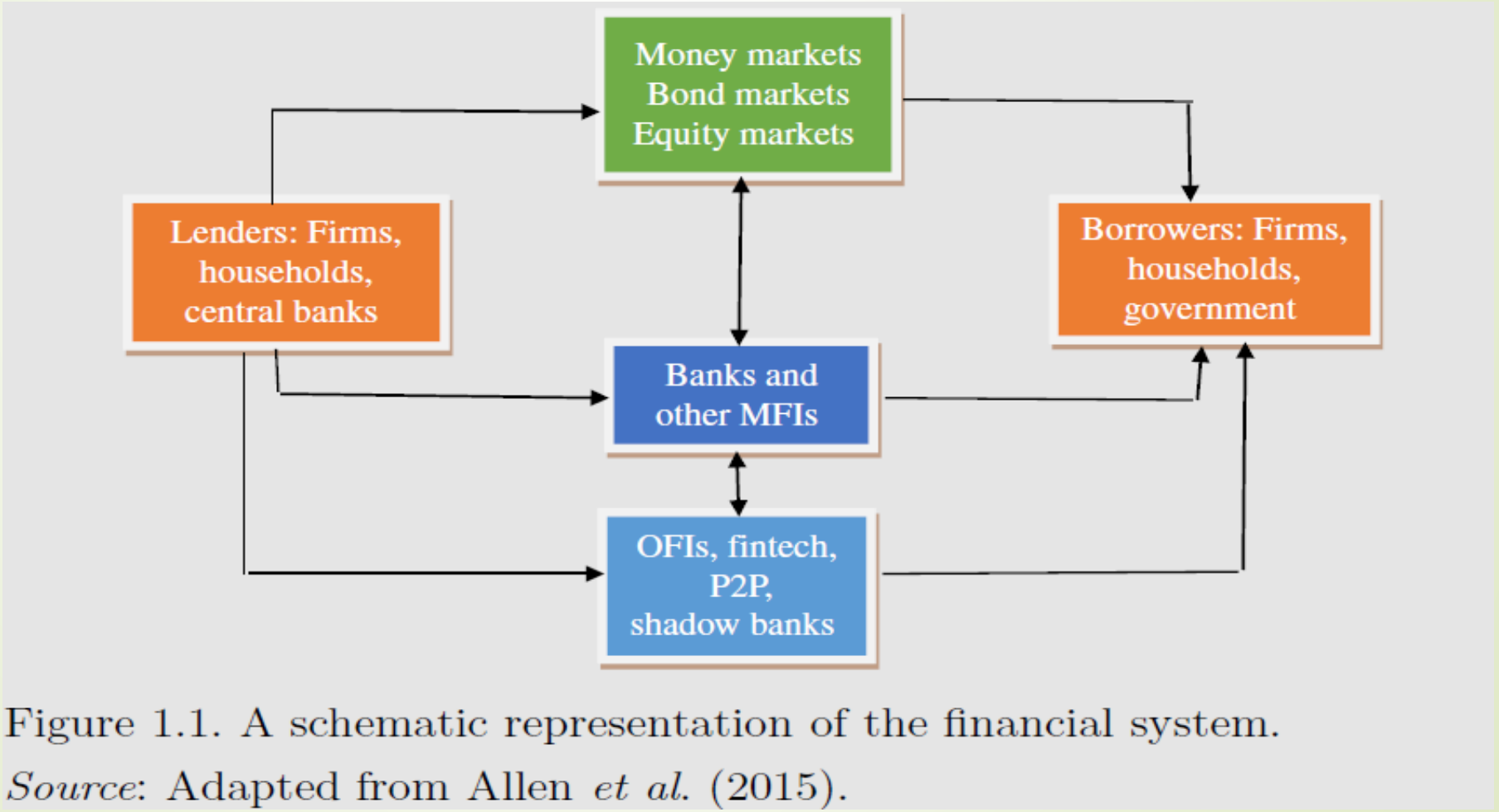


Figure 1.1. A schematic representation of the financial system.

Source: Adapted from Allen *et al.* (2015).

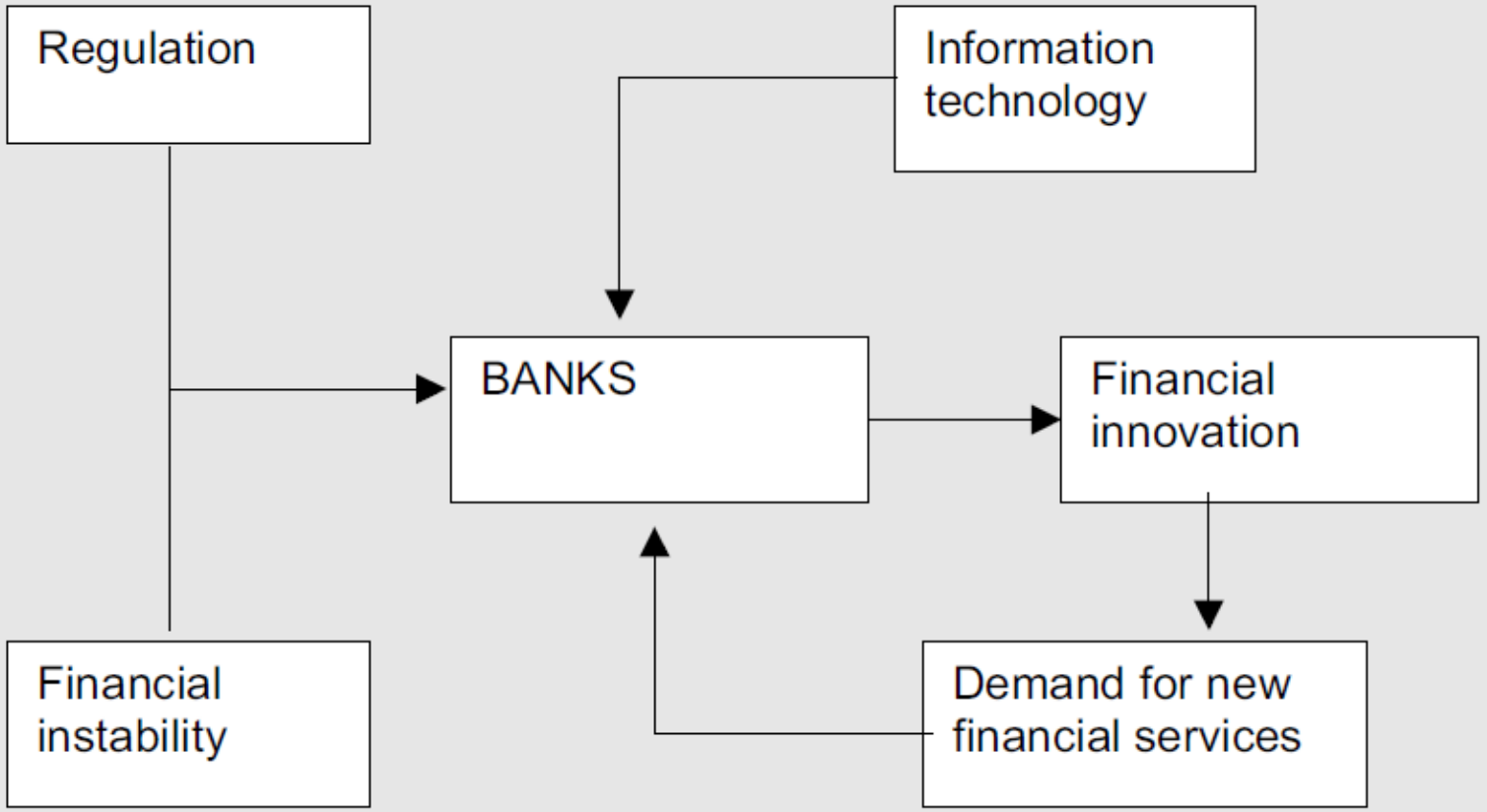
Deregulation

- The first phase of deregulation began with the lifting of quantitative controls on bank assets and the ceilings on interest rates on deposits
- The second phase of deregulation was the relaxation of the specialization of business between banks and other financial intermediaries allowing both parties to compete in each other's markets.
- The third phase concerned competition from new entrants as well as increasing competition from incumbents and other financial intermediaries

FINANCIAL INNOVATION

- Instability of the financial environment: Financial environment instability was associated with volatile and unpredictable inflation, interest rates and exchange rates and, consequently, increased demand for new instruments to hedge against these risks
- Regulation that tended to discriminate against certain types of financial intermediation led to regulatory arbitrage whereby financial institutions relocated offshore in weakly regulated centres
- Technological development has created a means of developing a wide range of bank products and cost reductions, thus meeting the demand for new instruments
- The first wave can be thought of as the application of computer technology in the bank organization
- The second wave involves the application of telecommunication and computer technology to the improvement of money management methods for the consumer
- The third wave involves the customer information file, which enables financial institutions to gather information about the spending patterns and financial needs of their clients so as to get closer to the customer
- The fourth wave is the further development of electronic payment methods, such as smart cards, e-cash and on-line and home banking services.

The process of financial innovation



Three principal forms of structural change due to financial innovation

- The switch from asset management to liability management. The move to liability management (namely, their ability to create liabilities by, for example, borrowing in the inter-bank market
- The development of variable rate lending. Volatile inflation and interest rates during the 1970s led to the further development of variable rate lending.
- The introduction of cash management technology. The pace of technological innovation in banking has seen the development of new financial products that have also resulted in a decline in unit costs to their suppliers the banks. Credit cards, Electronic Fund Transfer (EFT), Automated Teller Machines (ATMs), Point Of Sale (POS) machines have had the dual effect of improving consumer cash management techniques and reducing the costs of delivery of cash management services.

GLOBALIZATION

- The globalization of banking in particular has paralleled the globalization of the financial system and the growth in multinational corporations in general
- The internationalization of banking in the post-war world has resulted from the 'push' factors of regulation in the home country and the 'pull' factors of following the customer
- The globalization process has followed three strands
  - The first is the creation of a branch network in foreign countries.
  - The second strand is merger or outright takeover
  - The third strand is an alliance supported by minority shareholding of each other's equity

GLOBALIZATION

- The trend towards harmonisation in regulation has also facilitated the globalisation process
- This stemmed from the attempt to create a 'level playing field' through the 1988 Basel Accord
- Further impetus for the globalisation of banking comes from the WTO General Agreement on Trade in Services (GATS).
  - removing capital account restrictions
  - allowing market access,
  - ensuring equivalent regulatory treatment for foreign banks as domestic banks,
  - a move towards harmonising regulatory practice with international best practice

Total foreign claims ($ billion).

Country	1983	1988	1993	1998	2003	2008	2013	2018	2020
France	70.8	97.8	115.5	189.7	1,353.4	3,659.1	2,948.1	2,782.7	3,426.1
Germany	33.7	93.2	179.6	399.5	2,576.8	3,604.1	2,684.3	2,090.0	2,208.5
Japan	61.1	338.9	405.9	295.9	1,238.2	2,309.6	3,349.0	4,293.9	4,857.2
Switzerland	16.7	36.5	51.8	83.9	1,565.0	2,002.6	1,826.0	1,404.4	1,543.3
UK	85.8	99.4	184.9	338.5	1,637.4	3,644.6	3,789.1	3,397.5	3,889.7
USA	21.4	162.3	179.3	305.0	838.4	1,463.2	3,015.6	3,419.5	3,859.5

Source: BIS (2020 figures refer to the third quarter).

GLOBALIZATION (Contd.)

- The progressive relaxation of capital controls has added to the impetus for globalization in banking
- The pace of globalization in banking was furthered by the increasing trend to securitization. It comprises of two distinct processes
  - First, it can be thought of as the process by which banks unload their marketable assets typically mortgages, and car loans onto the securities market. These are known as Asset Backed Securities (ABSs).
  - Second, it can be thought of as the process of disintermediation whereby the company sector obtains direct finance from the international capital market with the aid of its investment bank
- The trend to harmonization in regulation has also facilitated the globalization process.

Illustration of the derivation of key ratios

Stylized Balance Sheet

Assets	£	*Liabilities*	£
Cash	100	Sight deposits	3000
Liquid assets	1000	Time deposits	2500
Loans and advances	6000	Bonds	1000
Fixed assets	200	Equity	800
Total	*7300*		*7300*

Stylized Profit and Loss (Income) Account

	£
Interest income	700
+ Non-interest (fee) income	600
Less interest expenses	600
Less operating expenses	500
= *Gross profit*	*200*

The key ratios are easily derived from these accounts as is demonstrated below:

$$\text{Return On Assets (ROA)} = (200/7300) \times 100 = 2.7\%$$
$$\text{Return On Equity(ROE)} = (200/800) \times 100 = 25\%$$
$$\text{Net Interest Margin (NIM)} = (700 - 600)/7300) \times 100 = 1.4\%$$
$$\text{Operating Expense (OE) ratio} = (500/7300) \times 100 = 6.8\%$$

PROFITABILITY

- The forces of competition unleashed by the deregulatory process have had stark implications for bank profitability
- Banks faced competition on both sides of the balance sheet.
- The effect of financial innovation and globalization has been to expand banks' balance sheets in both domestic and foreign assets.
- Profits as a per cent of assets declined in most cases both as balance sheets expanded and as competition put pressure on profitability.
- Prior to the major deregulatory forces of the 1980s, bank margins were relatively wide and also influenced by the level of interest rates
- The rise in interest rates that accompanied a rise in inflation increased margins because a significant proportion of deposits (i.e., sight deposits) paid no interest whereas all assets except the minimal deposits at the Bank of England earned interest linked to the official bank rate.

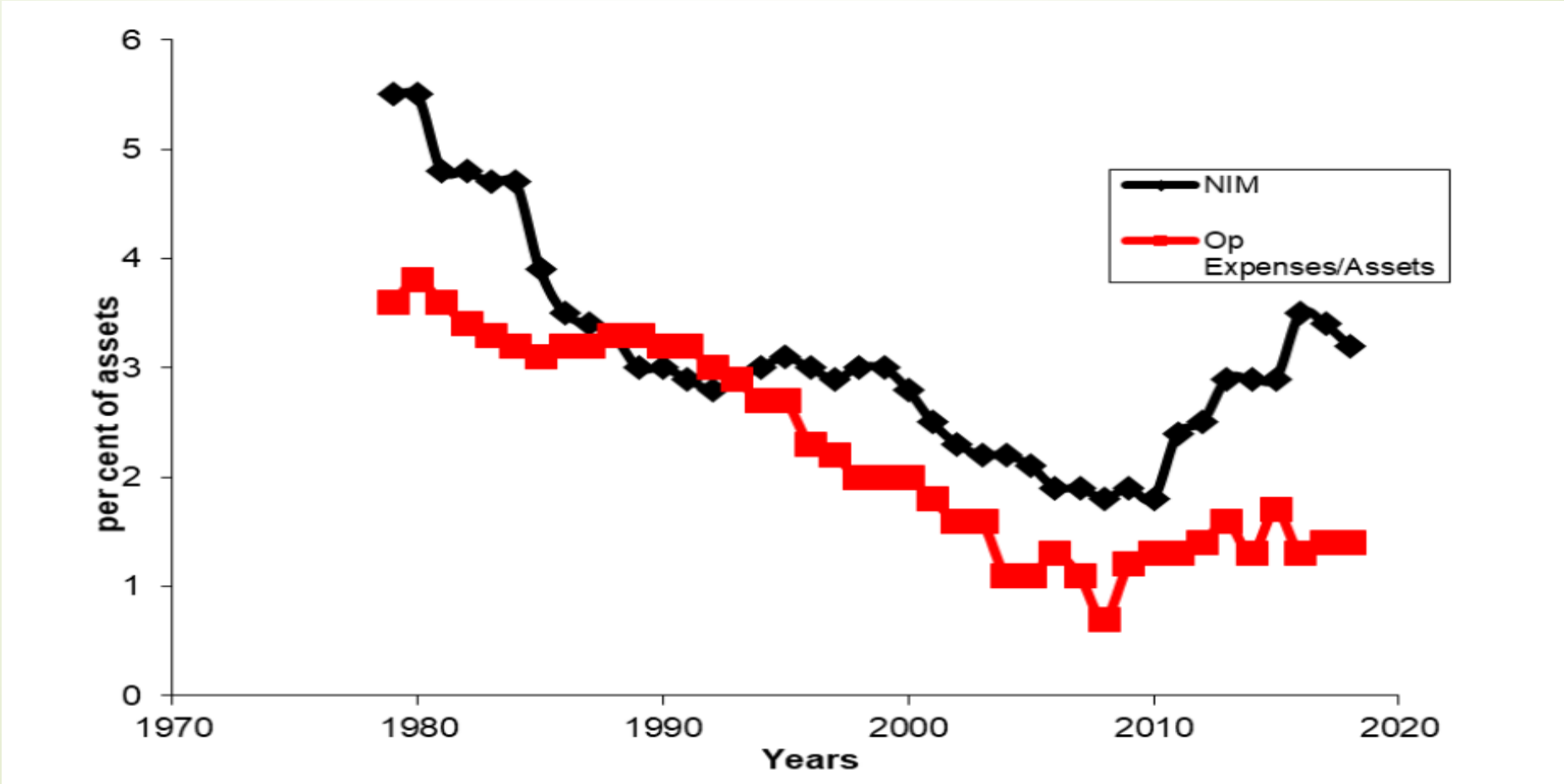
PROFITABILITY (Contd.)

- This was known as the **endowment effect**, which is made of two components ^ the net interest margin and the net interest spread:
- Endowment effect = Net interest margin - Net interest spread
- Net interest margin = Net interest income/Interest-earning assets
- Net interest spread = Rate received in interest-earning assets - Rate paid on interest-earning deposits
- The innovation of interest-bearing demand deposits reduced the endowment effect
- Competition from within the banking system and from Non-Bank Financial Intermediaries (NBFIs) saw spreads declining

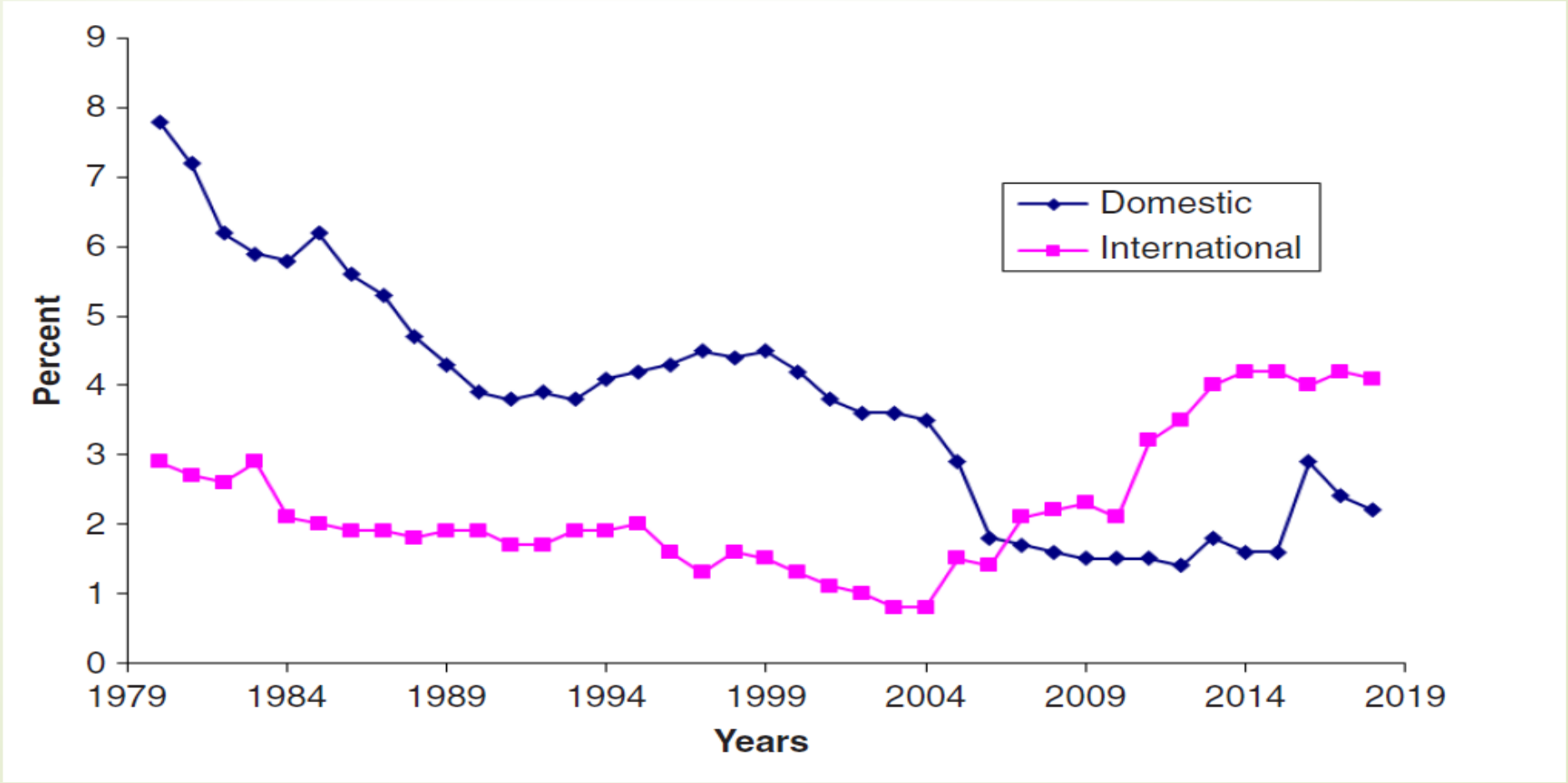
PROFITABILITY (Contd.)

- The traditional bank faces competition on both sides of the balance sheet.
- On the assets side, banks are faced with competition from specialist consumer credit institutions, NBFIs and the forces of disintermediation
- On the liability side, banks face competition from mutual funds, and an array of liquid savings products offered by NBFIs.

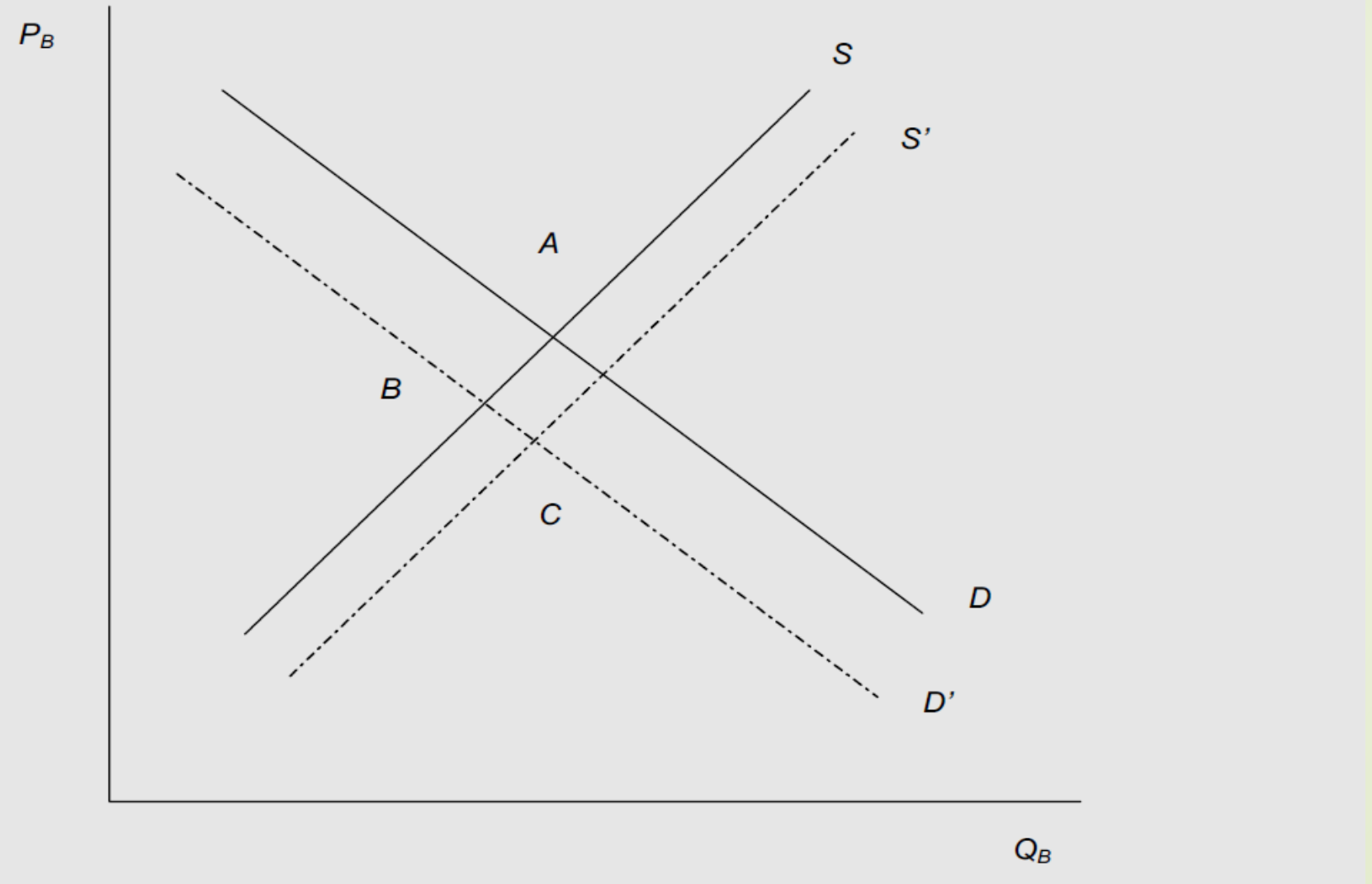
Net interest margin and operating expenses Barclays Group UK



Net interest margins Barclays Group



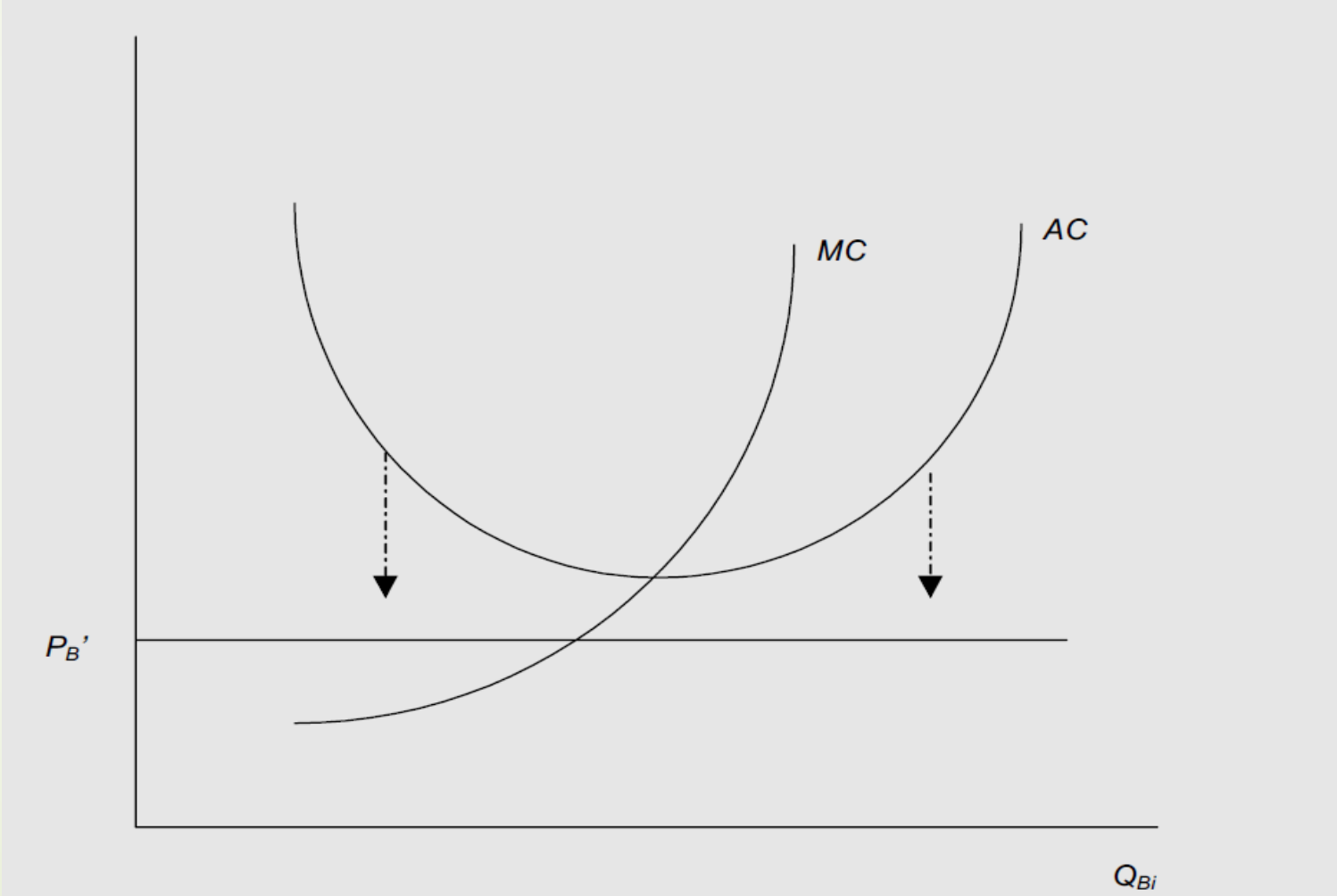
Competition from NBFIs



Bank restructuring (number of institutions

Country	1980	1992	1995	2001	2003	2004	2005	2008	2018
France	1,033	1,701	1,453	1,108	895	383	373	338	409
Germany	5,355	3,517	3,500	2,575	2,076	1,995	1,934	1,816	1,584
Japan	—	141	149	138	131	129	126	123	145
Switzerland	478	434	382	327	301	299	295	282	252
UK	796	665	560	385	356	356	335	338	315
USA	14,423	12,370	9,983	8,175	7,851	7,701	7,598	7,153	6,208

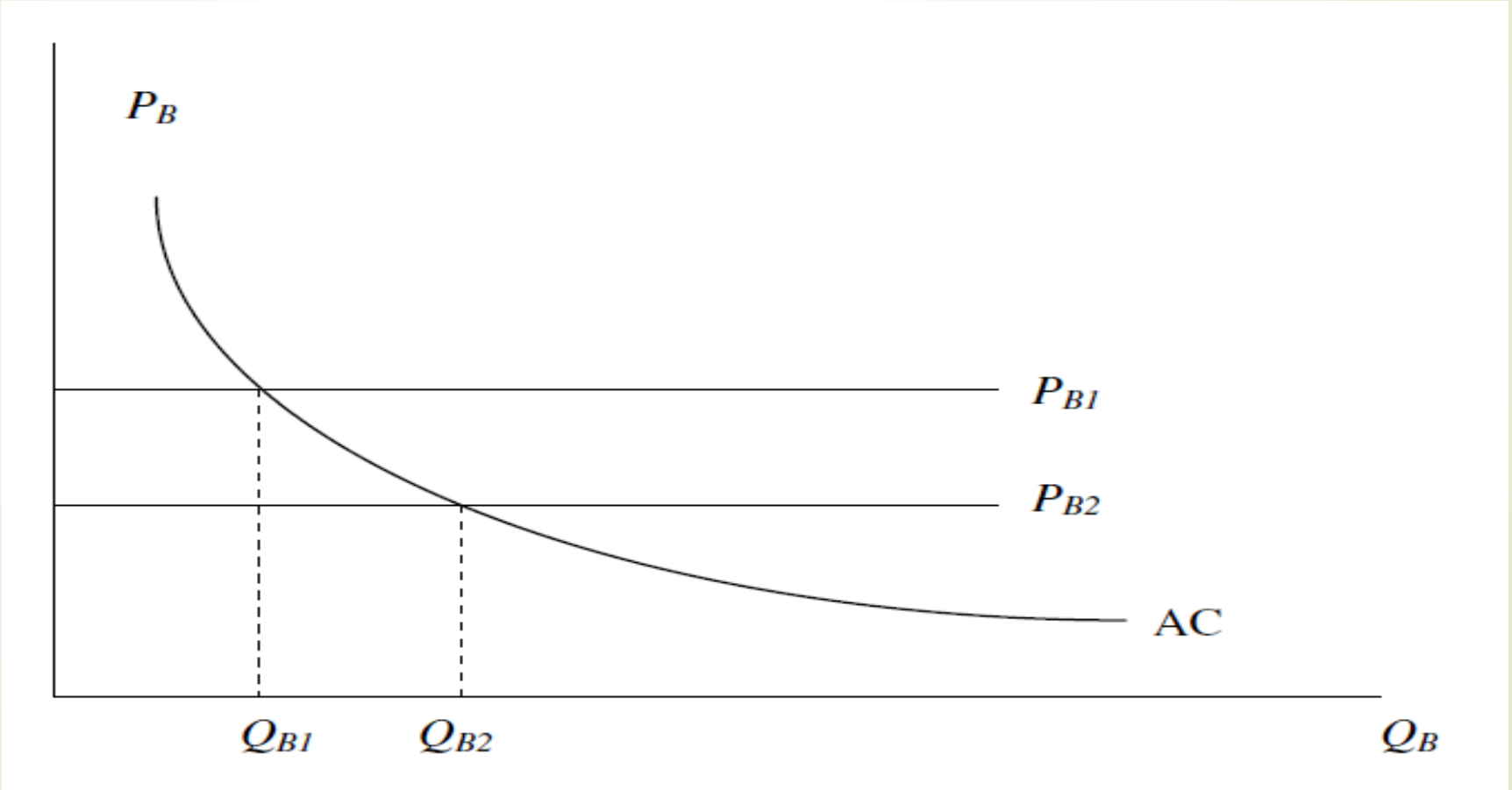
Fall in prices and unit costs



PROFITABILITY (Contd.)

- Restructuring of the banking system to lower operational costs has taken the form of downsizing through defensive merger and staff-shedding
- In most countries operational costs have declined as the pressure on profitability has driven banks to increase productivity by using technology intensively (online and telephone banking) and force down unit costs
- One of the products of competition on the balance sheet has been diversification. Banks have diversified into non-intermediary financial services, ranging from investment brokerage to insurance.
- With the lifting of quantitative controls on lending and deposit-taking, faced with increased competition and the loss of prime clients to the capital markets, banks have taken greater risks in expanding their balance sheets.
- Deregulation has been replaced with re-regulation with prudential regulations on capital adequacy
- The safety net of the lender-of-last-resort raises problems of creating moral hazard.
- The climate of competition and deregulation have led to adverse incentives with banks taking on excessive risk and making imprudent loans.

Mergers and cost reduction



Profitability and Competiton

- Competition is generally viewed as a good thing as it generates allocative, productive, and dynamic efficiency. However, competitive pressure has driven banks to consolidate with the threats that concentration has for market power and consumer welfare
- Technology has lowered the barriers to entry, which makes banking markets contestable. The threat of entry ensures that incumbent banks will behave in a competitive manner
- One of the products of competition on the balance sheet has been diversification. Banks have diversified into non-intermediary financial services, ranging from investment brokerage to insurance
- The climate of competition and deregulation has sometimes led to adverse incentives, with banks taking on excessive risk and making imprudent loans

The Post-GFC Trend

- While banks have opened their doors to sell new products, they also let in a myriad of new risks associated with this activity. Risks on the balance sheet remain, but risk management systems have been developed
- Credit ratings are available from many rating agencies, but internal models such as credit scoring and the use of proprietary models such as CreditMetrics™ have reduced the judgmental influence of the branch manager.
- Securitisation is used as a capital-raising and risk managing strategy
- The recognition of market risk has spawned an industry of internal model applications such as value at risk, and organisational, fraud, and dominance risk

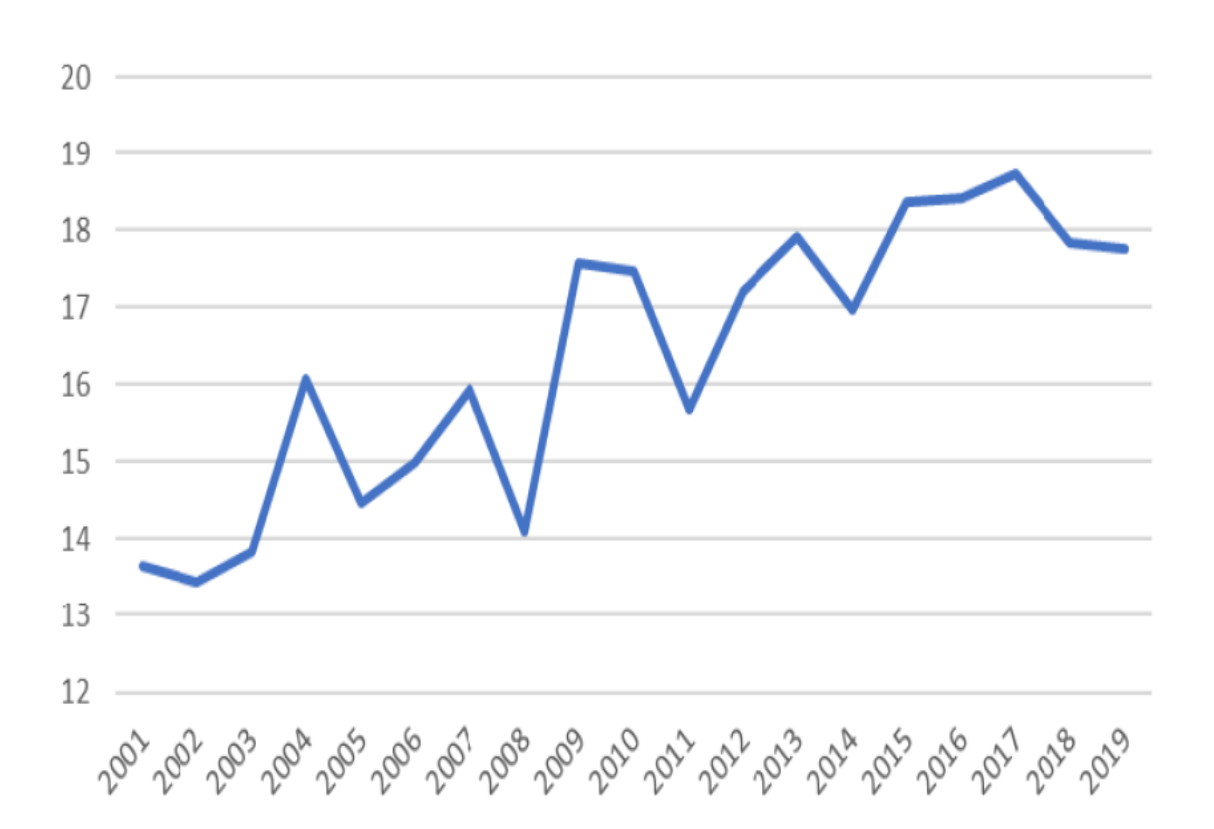
The Post-GFC Trend

- The erosion of monopoly power has seen increased risk-taking, which can be argued has resulted in increased financial fragility following deregulation and liberalisation.
- The negative effects of excess competition
  - the banks that threaten entry will bid margins down to the point where monopolistic competition is sustained. No external bank would want to enter a market that exhibits conditions of perfect competition
  - the market has remained largely under conditions of monopolistic competition relating to its balance sheet activity throughout the deregulatory period of the 1980s and 1990s
  - much of the perceived stability of the banking system was shattered by the onset of the global banking crisis of 2008.

The Post-GFC Trend

- The post-GFC world has signaled a change in the global banking environment
- More stringent capital-adequacy rules
- Reputational loss
- The failure of Lehman Brothers, spread into a sovereign debt crisis which saw governments in Europe take major stakes in banks.
- Changes in risk preferences of banks
- Monetary policy landscape has changed
- Banks have increased the capital held on their balance sheets,

Bank liquid reserves to total bank assets ratio (world)



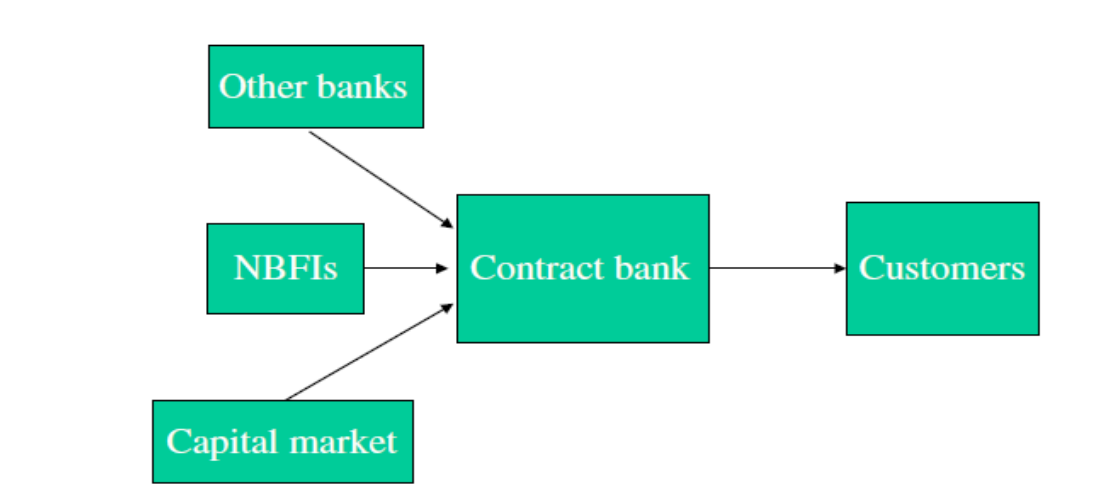
- Banks may withdraw from certain types of business as being outside their 'risk appetite'.
- This is usually referred to in the context of lending to small and medium-sized enterprises (SMEs).
- Banks may also change business models to secure funding from their customer base rather than from the interbank market.

Future

- The bank in the future may be forced into unbundling its services and providing a more transparent pricing strategy.
- The 21st-century bank may include the following features:
- Deconstruction — the process of decomposing services into their component parts which can then be priced and provided separately.
- Capital allocation — with excess capital expand the balance sheet by taking on more risky loans; make an acquisition; share buy-backs.
- Cross-subsidisation will be eroded as new entrants pick out the services that are the most profitable.
- Banks will separate core competencies from delivery.
- The crisis has slowed down the process of securitisation, but the forces of securitisation will re-emerge when banks are stronger.

Future

- Higher proportion of the bank's income will come from offbalance- sheet business.
- The structure of the bank may change and could move in the direction of what Llewellyn (1996) terms 'contract banking'.



Organisation of the contract banking

Winds of change

- There are the threats and opportunities posed by digitisation and fintech
- The threats and opportunities posed by the regulations of Environmental, Social, and Governance (ESG) practice and the drive to net-zero targets.
- Crowdfunding, fintech, P2P, and other types of shadow bank activities have emerged globally
- Fintech and bigtech create threats to banking from non-bank financial intermediaries, and also opportunities for banking to utilise the technology themselves
- Big data and technology could be the midwife that gives birth to the 21st-century bank.

Evolution of Banks

- Brett King, the author of Bank 4.0, describes the evolution of the bank in the 21st century as the move from
  - Bank 1.0 is a physical location, and it took deposits and made loans, paying interest on deposits, and charging interest on loans at a margin.
  - Bank 2.0 with banking out of hours through the use of ATMs.
  - Bank 3.0 defined banking in terms of frictionless access to payments through the smartphone.
  - Bank 4.0 is described as ubiquitous, frictionless, and delivered in real time.
- Banks are seen by regulators and customers as agents for the drive to sustainability through green financing

The evolution of the 21st-century bank.